



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,873	01/30/2006	Fumio Yamamoto	80371(47762)	8846
21874	7590	11/05/2009	EXAMINER	
EDWARDS ANGELI, PALMER & DODGE LLP			COONEY, JOHN M	
P.O. BOX 55874			ART UNIT	PAPER NUMBER
BOSTON, MA 02205			1796	
MAIL DATE		DELIVERY MODE		
11/05/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,873	<b>Applicant(s)</b> YAMAMOTO ET AL.
	<b>Examiner</b> John Cooney	<b>Art Unit</b> 1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 July 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

Applicant's arguments filed 7-2-09 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kihara et al.(6,627,671) in view of GB-1,204,230.

Kihara et al. discloses preparations of polyurethane foams prepared from (1.) isocyanate prepolymers formed from toluene diisocyanates and polyols, (2.) polyol compositions including polyols as claimed by applicants and amine curatives, and (3.) water (see abstract, column 2 line 23 – column 5 line 17, and examples).

Kihara et al. differs from applicants' claims in that it does not particularly require employment of the chlorinated amine curatives of applicants' claims in its polyol composition. However, GB-'230(see title and page 1 lines 64 – page 3 line 84, as well as, the entire document) discloses the employment of the chlorinated amine curatives of applicants' claims in the realization of good polyurethane articles based on isocyanate terminated prepolymers. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the chlorinated amine curatives of GB-'230 in the preparations of Kihara et al. for the purpose of imparting their reaction curative

effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Additionally, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

As to the pre-blending conditions of applicants' claims, it is seen that the disclosure at column 4 lines 40-42 provides for this feature of applicants' claims. Even if difference were evident based on this feature of applicants' claims, it is held that Kihara et al. does disclose pre-blending of its polyol with water (column 4 lines 40-42), and such a manipulation of Kihara et al.'s own processing operations would have been obvious to one having ordinary skill in the art for purposes of providing adequate product formation in the absence of a showing of new or unexpected results.

As to the variations in the temperature conditions of applicants' processes, Kihara et al. provides for heating of its reactive elements, and it would have been within the skill of the ordinary practitioner to have varied the heating conditions from within the teachings of Kihara et al. for purposes of modifying and enhancing the mixing, interaction and/or reactivities of the systems in order to arrive at the processes and products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments have been considered. However, rejection is maintained to be proper. It is maintained that the features of applicants' claims are adequately met by the combinations of the above cited prior art, and the blends of curatives of applicants' claims are adequately provided for by the teachings and fair suggestions of the secondary GB-'230 teaching in the address of the deficiencies of the primary, Kihara et al., teaching.

Applicants' arguments pertaining to the problem(s) of the prior art that are being addressed do not correspond with a commensurate in scope showing of new or unexpected results that are associated with differences in the claims. Adequate showings of new or unexpected results would require more than one specific blend of mixture A from within the scope of applicants' claims. Further, more encompassing selections of polyols from the scope of the claims would need to be represented by the showings. Further, it is not evident in the current showing(s) of record that unexpected results carry to the lower, 30% content value, endpoint of the claims since the only difference in the comparisons for this value point is an A-B rating after 6 months.

Additionally, as to the problem being solved discussed in applicants' reply, it should be noted that obviousness does not require that the same problem be solved by the teachings of the prior art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1796

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/  
Primary Examiner, Art Unit 1796